



626505X
August 4, 2020

Mr. William J. Oldenburg, PE
Assistant Director of Project Development
Chairman, Consultant Selection Committee
New Hampshire Department of Transportation
william.oldenburg@dot.nh.gov

**Re: Statewide On-Call Preliminary Engineering Prequalified List of Consultants for locally administered
Local Public Agency (LPA) Qualifications-Based Selection Contracts**

Dear Mr. Oldenburg:

As consultants who also happen to be selectboard members, firefighters, previous NHDOT employees, and of course local taxpayers, the DuBois & King (D&K) team understands the technical and regulatory complexities of LPA projects as well as the realities faced by municipal officials and the public. In this letter of interest, we present a qualified group of professionals who also work in disciplines beyond those specifically requested or typically required for LPA projects such as water/sewer, electrical, mechanical, hazardous materials, and fire protection engineering. D&K has included subconsultant partners with which we have successfully worked with for over ten years on locally-, state-, and federally-funded projects. Lines of communication within our team and with New Hampshire State officials are well-established, which positions D&K as a responsive partner for municipalities.

D&K has worked closely with local, state, and federal partners throughout New Hampshire for nearly 60 years. D&K is a strong 120-person firm located in Bedford, Laconia, and Keene as well as Maine, Vermont, and New York. Over the past 25 years, our team has advanced approximately 150 municipally-managed transportation projects receiving federal and state funding. We employ 14 NH LPA-certified staff members and have a solid understanding of this program. The team members assigned to work on NH LPA projects also have positive and current experience from successfully completed and ongoing NHDOT projects such as the NH 113 ABC bridge project in Tamworth and the NH 18 bridge in Littleton. We are currently participating in LPA, SBA, and MOBRR projects in study, design, and construction phases.

I encourage you to contact our references, and we have a strong interest in continuing to serve the NHDOT and municipal staff in our mission to improve the safety and efficiency of our transportation networks for those traveling throughout and living in New Hampshire. If you have any questions, please do not hesitate to contact me at 603.637.1043 or jhall@dubois-king.com.

Very truly yours,
DuBois & King, Inc.

A handwritten signature in blue ink that reads 'James Hall'.

James Hall, PE, LPA
Contract Manager

HIGHWAY DESIGN

D&K is an employee-owned New England firm with transportation engineers who provide geometric design of new or rehabilitation of existing roadways or intersections throughout New Hampshire. Our group has developed preliminary design, final design, and development of contract plans and documents for municipal, state and federal transportation programs and compliance with the Manual on Uniform Traffic Control Devices (MUTCD), the AASHTO Green Book, and NEPA, ACOE, and NHDES regulations and processes throughout New England. D&K provides professional engineering services for:

Roadway Evaluation, Reconstruction, & Rehabilitation	Complete Streets
Scoping Planning	Sidewalks
Slope Stabilization	Bike Lanes - Protected
Signalized Intersections	Multiuse Pathways
Roundabouts	Parking Lots
ROW Acquisition	Railroad Engineering
Landscape Design	Public Engagement
Road Diets	Street Lighting
	Salt Sheds

BRIDGE DESIGN

D&K specializes in small to mid-sized bridges and culverts. Since 2009, D&K has provided design services for over 40 Municipal Bridge Aid projects and over 170 bridges/culverts. D&K's New Hampshire Bridge Department is centrally located in Bedford and is experienced in the following areas:

Accelerated Bridge Construction (ABC)
New Hampshire State Bridge Aid (SBA)
Historic Trusses and Covered Bridges
Bridge Rehabilitation

D&K is a trusted resource experienced with the development of preliminary design, final design, and development of contract plans and documents for bridge maintenance, preservation, rehabilitation, and replacement. D&K has designed rehabilitation and replacement for numerous steel, concrete, and timber bridges.

In addition, D&K has provided bridge inspection and load rating services hundreds bridges of various bridge types throughout New England. D&K performs load

rating of bridges in the NHDOT as required by Bridge Rating Form 4 (as-built and as-inspected conditions).

D&K's Water Resources Department completes analysis of and recommendations for proposed hydraulic conditions. This analysis includes existing and proposed scour measures and storm event capacities.

APPROACH

NHDOT LPA projects follow the design development process as outlined in NHDOT's LPA Manual. D&K has significant experience advancing projects in accordance with the Local Public Agency Manual for the Development of Projects. For a standard bridge or roadway project, the required tasks typically include:

Predesign conference
Topographic field survey
Geotechnical Investigation
Environmental resource inventory
Engineering study
Preliminary design
Public outreach/meetings
NEPA and SHPO clearances
Utility coordination
Final design
Construction cost estimation
Bid phase assistance

The following section outlines the D&K's interpretation of the NHDOT LPA process:

Project Initiation. D&K begins projects by discussing the scope and schedule with the Municipality and NHDOT, refining these items as needed to best serve the interests of the Municipality and the project objectives. This step will include data collection, such as survey and environmental resource identification.

Engineering Study. D&K works with the Municipality and the NHDOT LPA program to determine what steps are required to satisfy federal requirements for the alternatives evaluation and public outreach. D&K develops a draft engineering study for the Municipality and NHDOT to review, makes revisions based on input received, and develops a final report before proceeding with the development of preliminary plans.

Right-of-Way (ROW). D&K works with the Municipality to determine if the Municipality owns the required ROW for the project. Whether permanent or temporary, if acquisitions or easements are required, D&K works with the community to acquire the rights required to construct the project.

Preliminary Plans. D&K develops preliminary plans in conformance with the NHDOT requirements. Following are key elements of the preliminary plans:

Location plan	Vertical alignment
General plan and profile	Cross slope
Detail sheets	Grading, drainage, utilities, and erosion control
Bridge layout sheets	Signal modifications,
Typical and critical cross-sections	Pedestrian crossing facilities
Cross-section intersecting facilities	Signing and striping design and layout
Horizontal alignment	Updated cost estimate

In addition, applicable permit applications will be prepared and submitted to the appropriate agencies at this time. Meetings with NHDOT Cultural and Natural Resources occur during the preliminary design phase.

Final Plans/Contract Documents. In this phase, D&K incorporates comments and permitting requirements. The results are the development of a plans, specifications, and estimates (PS&E) submission. Deliverables typically include the following:

Structural bridge details
Details for drainage, saw cuts, curbing, and transitions
Traffic management plan
Erosion control plan and details
Checks that construction plans agree with pay items in contract and final engineer's estimate
Coordination of utility relocation
Updated cost estimate
Contract documents

Bidding Documents. D&K prepares completed bid documents in accordance with NHDOT LPA program requirements, including the final contract plans, bid

forms and construction specifications. Construction specifications will include standard front end documents including: instruction to bidders, bid forms, standard general conditions, supplementary conditions, federal funding requirements, and special provisions. We assist the Municipality in reviewing the contractor bids, including bid bonds and bid tabulations, and we provide a recommendation of award.

Construction Administration. D&K is experienced in performing construction oversight and administration, including submittals, pay requests, change-orders, weekly construction meetings, general construction observation, Federal Compliance Office requirements, final project walk-through, development of record drawings, and project closeout.

ADDITIONAL WORK SERVICES REQUIRED

D&K's Project Managers regularly coordinate with the LPA, NHDOT, and all stakeholders. D&K also provides traffic control design, hydraulic modeling and analyses and geotechnical services as well as the following:

Permitting. D&K staff guide projects through local, state, and federal regulatory documentation, clearances, and permitting. With expertise in documentation, alternative analysis, and resource identification, delineation, and mitigation, D&K staff have provided NEPA, environmental, and permitting services for a full range of assignments, including both large and complex and small and routine transportation projects.

Planning and Study Phase. DuBois & King's planners and engineers partner with communities, state agencies, RPCs, and the public on many projects. These efforts include a public involvement process that includes public hearing presentations, project websites and a deep bench of interactive tools to suit project and stakeholder needs.

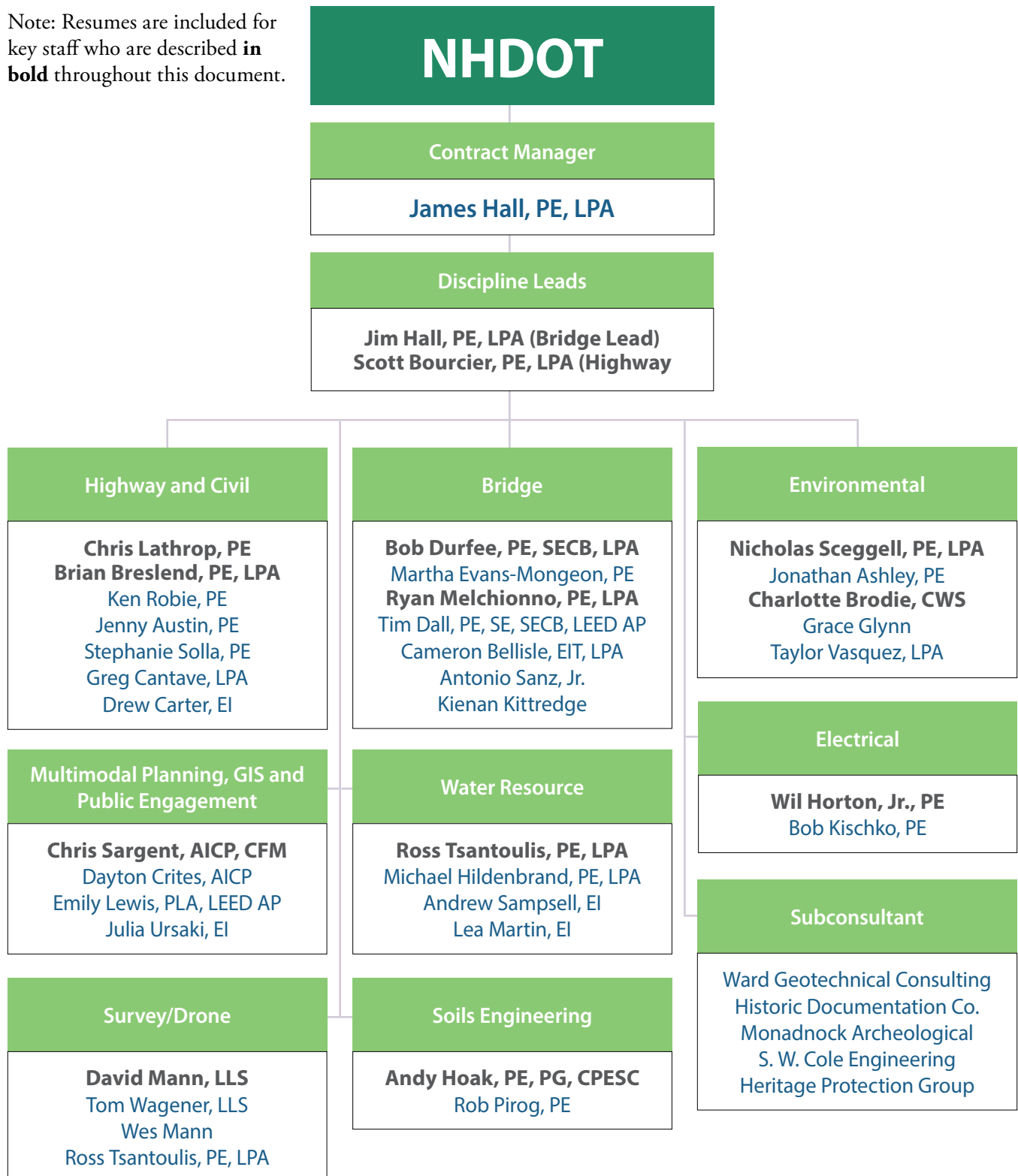
Survey. D&K uses the latest survey tools to achieve a high level of accuracy and reduce data collection and processing time for basemaps developed in AutoCAD and/or MicroStation. D&K's field personnel are equipped with robotic total station and RTK GPS systems. The firm also uses small unmanned aerial systems (drones) to collect planning-level survey data and develop project exhibits.

Online Bid Portal. The D&K website includes a bid portal to assist communities in providing project bid services that outreach to contractors throughout New England.

15 Constitution Drive, Suite 1L, Bedford, New Hampshire 03110 | (603) 637-1043 | <https://www.dubois-king.com>

ORGANIZATIONAL CHART

Note: Resumes are included for key staff who are described in **bold** throughout this document.



PROJECT TEAM

		Years of Experience	Years with D&K	NH LPA/DOT Experience	Project Management	Highway Design	Bridge Design	Structural Engineer	Alt. Procurement Methods	Corridor Study Planning	Bridge Inspection	Bridge Load Rating	Hydrology/Hydraulics	Environmental	Traffic Analysis	Geotechnical Engineer	Surveyor	Public Involvement
Highway + Civil	Jim Hall, PE, Contract Manager, Bridge Lead	20	2	✓	✓		✓	✓	✓		✓	✓						✓
	Scott Bourcier, PE, Highway Lead	22	17	✓	✓	✓			✓	✓			✓	✓				✓
	Chris Lathrop, PE, Highway Engineer	25	14	✓	✓	✓			✓						✓			✓
	Brian Breslend, PE, Highway Engineer	13	13	✓	✓	✓									✓			✓
	Ken Robie, PE, Highway Engineer	31	1		✓	✓	✓		✓	✓				✓				✓
	Jenny Austin, PE, Traffic Engineer	19	8		✓	✓				✓					✓			✓
	Stephanie Solla, PE, Transportation Engineer	7	5	✓		✓									✓			
	Greg Cantave, LPA, Senior Designer	14	6	✓														✓
	Drew Carter, EIT, LPA, Staff Engineer	4	1	✓		✓												
Bridge	Bob Durfee, PE, Bridge Engineer	40	14	✓	✓	✓	✓	✓	✓		✓	✓						✓
	Martha Evans-Mongeon, PE, Bridge Engineer	36	3	✓	✓		✓	✓	✓		✓	✓						✓
	Ryan Melchionno, PE, Bridge Engineer	14	1	✓	✓		✓	✓	✓		✓	✓						✓
	Tim Dall, PE, SE, SECB, Structural Engineer	24	7		✓		✓	✓	✓		✓	✓						✓
	Cameron Bellisle, EIT, Design Engineer	5	4	✓			✓				✓	✓						✓
	Antonio Sanz, Jr. Senior Designer	20	20	✓		✓	✓							✓				
Environmental	Kienan Kittredge, Staff Engineer	1	1	✓			✓											
	Nicholas Sceggell, PE, LPA, Env. Engineer	16	8	✓	✓				✓				✓	✓				✓
	Jonathan Ashley, PE, Env. Engineer	27	4		✓	✓								✓				✓
	Charlotte Brodie, CWS, Field Naturalist	33	32	✓	✓									✓				✓
	Grace Glynn, Staff Field Naturalist	5	1	✓										✓				
Planning	Taylor Vasquez, Staff Permitting Specialist	4	4	✓		✓							✓	✓				
	Chris Sargent, AICP, CFM, Senior Planner	18	3		✓					✓				✓				✓
	Dayton Crites, AICP, Senior Planner	10	1		✓					✓					✓			✓
	Emily Lewis, PLA, Landscape Architect	13	1		✓									✓				✓
H ₂ O Resource	Julia Ursaki, EI, Planner/Engineer	4	2			✓				✓					✓			✓
	Ross Tsantoulis, PE, Hydraulic Engineer	13	3	✓	✓	✓			✓				✓	✓				✓
	Michael Hildenbrand, PE, LPA, Stormwater Eng.	19	4	✓	✓									✓				✓
	Andrew Sampsell, EI, Hydraulic Design Eng.	4	4	✓									✓					
Elec.	Lea Martin, EI, Hydraulic Design Eng.	3	2										✓	✓				
	Wilbur Horton, Jr., PE	33	8	✓	✓													✓
Survey	Bob Kischko, PE	46	9	✓	✓				✓									✓
	David Mann, LLS, Licensed Surveyor	45	3	✓													✓	✓
	Tom Wagener, LLS, Licensed Surveyor	33	3	✓													✓	
	Wes Mann, Survey Technician	17	3	✓													✓	
Soil	Andy Hoak, PE, PG, CPESC, Hydrogeologist	27	5		✓				✓				✓					✓
	Robert Pirog, PE, Geotechnical Engineer	31	1													✓		

KEY STAFF

	CREDENTIALS	TOTAL YEARS	YEARS AT D&K
Jim Hall: Bridge Lead	Professional Engineer, LPA	20	2
Jim manages D&K's Bridge Department and has provided construction administration and observation for Bridge Aid, MOBRR, and other federally-funded projects. He is proficient in bridge inspection, design, load rating, and construction—including ABC.			
Scott Bourcier: Highway Lead	Professional Engineer, LPA	21	16
Scott has managed numerous NH LPA pedestrian, roadway, and traffic calming projects. He has provided permitting for SBA projects.			
Highway and Civil			
Chris Lathrop	Professional Engineer	25	14
Chris manages D&K's Highway Department. His experience includes resurfacing and safety improvements for local, state, and federal roads.			
Brian Breslend	Professional Engineer, LPA	13	13
Brian has experience in the design and construction phases of locally- and state-managed multimodal- and vehicle-focused projects.			
Bridge			
Bob Durfee	Professional Engineer, LPA, Structural Engineering Cert. Board	40	14
Bob's experience includes 75+ SBA projects. He provides national-level expertise in the restoration of covered and other historic bridges.			
Ryan Melchionno	Professional Engineer, LPA	14	1
Ryan has experience serving all phases of SBA, MOBRR, and other bridge projects throughout New Hampshire and New England.			
Environmental			
Nick Sceggell	Professional Engineer, LPA	16	8
Nick manages the firm's Laconia office and has significant design and permitting experience for LPA, roadway, utility, utility bridge, SBA bridge, drainage, and site projects throughout New Hampshire.			
Charlotte Brodie	NH Certified Wetland Scientist	33	32
Charlotte provides environmental monitoring, RTE inventory, and wetland delineation for highway, bridge, dam, and airport projects.			
Multimodal Planning, GIS, and Public Engagement			
Chris Sargent	American Institute of Cert. Planners, Cert. Floodplain Manager	18	3
Chris has experience leading public engagement and managing transportation and land use planning projects.			
Water Resource			
Ross Tsantoulis	Professional Engineer, LPA, FAA Part 107 Certificated Drone Pilot	13	3
Ross has experience providing transportation design as well as hydraulic engineering using HEC-RAS for roadway, bridge, and dam projects.			
Electrical			
Wil Horton, Jr.	Professional Engineer	33	8
Wil frequently leads design of distribution and code compliance for signals, site lighting, street lighting, facilities, and other infrastructure			
Survey/Drone			
David Mann	Licensed Land Surveyor	45	3
David manages the firm's Keene office. He provides boundary, ROW, topographic, and construction survey and research.			
Soils Engineering			
Andy Hoak	Professional Engineer, Professional Geologist	27	8
Andy has experience modeling soils structure, groundwater migration, and open channel flow dynamics.			

Subconsultants: D&K will engage the following subconsultant partners, each of which has worked closely with D&K for over a decade on LPA, SBA, and/or other federally-funded projects: Ward Geotechnical Consulting (additional geotechnical capacity); Historic Documentation Co. (cultural resources), Monadnock Archeological (cultural resources); S. W. Cole (borings); Heritage Protection Group (Fire Protection Engineering).

REFERENCES

David Stack

Bow Town Manager
10 Grandview Road
Bow, NH 03304
603.228.1187 ext. 110
townmgr@bow-nh.gov



Projects: 4 SBA Projects, 1 Pedestrian Crossing Project, and 1 State Aid Highway Project, plan review and construction observation.

D&K has served as Bow's Town Engineer since December 2011. Services also include formal and informal site visits to respond to emergencies and short- and long-term projects; transportation planning; and engineering to support capital improvement planning.



Carol Murray, PE

Public Works Director
Town of Wells
208 Sanford Road, Wells, ME 04090
603.630.9980, murray@wellstown.org



Projects: Webhannet Seawall Replacement and Rehabilitation, Casino Square Seawall Replacement and Rehabilitation, Newhall Road Bridge Replacement, Drakes Island Bridge Replacement, Bragdon Road Bridge Replacement, and Charles West Bridge Rehabilitation

Jim Donison, PE

Public Works Director (formerly Hooksett Public Works Director)
City of Lebanon
51 North Park Street, Lebanon, NH 03766
603.448.3112, james.donison@lebanonnh.gov

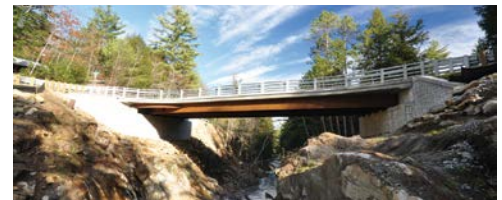
Projects: NH 12A Bridge, Lahaye Drive Shared Use Path, Landfill Gas to Energy Project, Hooksett Lilac Bridge



Michael Brady

Hill Selectboard
30 Crescent Street, Suite 1, Hill, New Hampshire 03243
603.934.1094, hillselectmen@comcast.net

Projects: Bunker Hill Road Bridge; Borough Road Bridge



APPENDIX: PROFESSIONAL RESUMES

Following are descriptions of relevant project assignments for key staff.

TEAM MEMBER	CREDENTIALS	TOTAL YEARS	YEARS WITH D&K
Jim Hall: Bridge Lead	Professional Engineer, LPA	20	2
NH 113 Bridge, (ABC) Tamworth. (NHDOT)			
Senior Bridge Engineer for a \$2.3M project that constructs a 133-ft-long, 1-span bridge using ABC techniques.			
NH 12A Bridge, Lebanon. (MOBRR)			
Lead Bridge Engineer for a \$7M project that replaces a state highway bridge over the NH Railroad.			
Dunklee Road Bridge and NH 3A Intersection, Bow. (Bridge Aid, State AID Highway)			
Project Manager responsible for leading construction administration and observation as well as design services for a bridge rehabilitation and a new signalized intersection.			
Jenkins Road Bridge Replacement, Bedford. (SBA)			
Senior Bridge Engineer responsible for structural design, specifications, estimates and plan development. This project consisted of the replacement of three pipe culverts with a 28-ft-long precast concrete rigid frame.			
Bunker Hill Road Bridge, Hill. (SBA)			
Project Manager responsible for leading a project that replaces a failing superstructure with scoured abutments. The project replaces the superstructure with precast deck beams and rehabilitates the abutments.			
Scott Bourcier: Highway Lead	Professional Engineer, LPA	21	16
SRTS Sidewalks, Claremont. (LPA)			
Project Manager responsible for leading construction admin and observation as well as design services for a pedestrian enhancement project.			
Road Diet Painted Pedestrian Facilities, Keene. (LPA)			
Project Manager responsible for leading construction admin and observation as well as design services for the first residential road diet project in New Hampshire.			
Route 130 TE Sidewalk, Brookline, NH. (LPA)			
Quality Assurance/Quality Control review for 4,800 LF of new sidewalk in a commercial/residential area.			
Safe Routes to School, Hillsborough, NH. (LPA)			
Senior Project Engineer responsible for the design and permitting of 1,100 lf of bituminous ADA-compliant sidewalk; locating and designing crosswalks including ADA tip-downs; and traffic calming measures.			
Highway and Civil			
Chris Lathrop	Professional Engineer	25	14
Road Reconstruction, US 202, NHDOT, Peterborough, NH. (NHDOT)			
Project Engineer for final design of approximately 3.2 kilometers of US 202 reconstruction and realignment of approximately 100 meters of Scott Mitchell Road.			
Road Reconstruction, US 3/NH 11, NHDOT, Belmont. (NHDOT)			
Responsibilities included traffic control alternatives, construction staging and sight distance calculations, and preliminary and final design of 1.3 kilometers of roadway from the Belknap Mall to the Laconia City line.			
NH 101 Road Rehabilitation/Widening, NHDOT, Manchester-Auburn. (NHDOT)			
Project Engineer for preliminary design of 2.6 kilometers of rehabilitation and widening of NH Route 101.			
Highway Resurfacing IDC, VTrans, Statewide, VT. (FHWA)			
Project Manager for successive on-call paving contracts. Responsible for advancing design for over 250 miles of US and state highway projects. Projects also include signing, intersection, drainage, and multimodal improvements.			

TEAM MEMBER	CREDENTIALS	TOTAL YEARS	YEARS WITH D&K
Brian Breslend	Professional Engineer, LPA	13	13

Lahaye Drive Shared Use Pathway, Lebanon. (LPA)

Project Engineer responsible for survey, design, permitting of an approximately 1000-ft section of multi-use path.

NH 12A Bridge, Lebanon. (MOBRR)

Senior Roadway Engineer for a \$7M project that replaces a state highway bridge over the NH Railroad.

Gale River Loop Road & Bridge Reconstruction, USDA Forest Service, White Mountain National Forest, Bethlehem. (USDA Forest service)

Transportation Engineer for a design-build reconstruction of a portion of Gale River Loop Road and four bridges.

Bethel Mountain Road Slope Stabilization, Rochester, VT. (FHWA ER)

Project Manager responsible for advancing construction, design, and permitting of a 2,800-LF roadway repair project in fewer than six months. *The project received a Grand Award for Engineering Excellence from ACEC-VT.*

Bridge

Robert Durfee	Professional Engineer, LPA, Structural Eng. Certification Board	40	14
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Main Street Bridge Rehabilitation, Laconia. (SBA)

Project Manager for the rehabilitation and redesign of a three-span curved steel stringer vehicle and utility bridge over the Winnepesaukee River in a confined urban context. The project included complex construction phasing to meet structural needs as well as needs of the traveling public, downtown merchants, and event organizers. *The project received the Overall Award for Engineering Excellence from ACEC-NH.*

Village Covered Bridge, Wentworth. (SBA and Municipally Managed)

Project Manager for the inspection, transportation, and rehabilitation of a covered recreation bridge with a 6-ton capacity. *The project received awards from ACEC-NH, SENH, and Plan-NH.*

Lilac Pedestrian Bridge, Hooksett. (SBA and Municipally Managed)

Project Manager for the fast-tracked evaluation, design, and construction phase of a project that replaced a failing bridge with a 490-ft-span steel truss. *The project received a Silver Award for Engineering Excellence from ACEC-NH.*

NH 12A Bridge, Lebanon. (MOBRR)

Project Manager for a \$7M project that replaces a state highway bridge over the NH Railroad.

Ryan Melchionno	Professional Engineer, LPA	14	1
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Bunker Hill Road Bridge, Hill. (SBA)

Bridge Engineer and Resident Project Representative responsible for part-time observation of contractor's activities. The project replaces a failing voided slab superstructure with scoured abutments. The replacement superstructure uses precast concrete deck beams, and the project also rehabilitates the abutments.

Bunker Hill Road Bridge, Tamworth. (Municipally Funded)

Bridge Engineer and Resident Project Representative responsible for part-time observation of contractor's activities. The project replaces a short-span, undersized culvert at the end of its service life with a steel stringer and concrete deck on new abutments.

Engineering Investigation and Recommendations Study for Improvements to the Perkins Cove Footbridge, Ogunquit, ME. (Municipally Funded)

Bridge Engineer currently developing the rehabilitation, replacement and demolition alternatives for a high-profile 4-span timber pedestrian bridge located over a commercially active navigable waterway. The structure consists of two bascule leaves, each with a hydraulically driven concrete counterweight system. The substructure elements are original and date back to 1944+/-, and other elements of the bridge were replaced or modified at various points thereafter.

TEAM MEMBER	CREDENTIALS	TOTAL YEARS	YEARS WITH D&K
Environmental			
Nick Sceggell	Professional Engineer, LPA	16	8
<p>Marlboro Street Reconstruction, Keene, NH. (LPA) Project Manager for the design of 4,700 ft of utilities and road reconstruction in an urban commercial/residential area. The project includes the use of chicanes and other multimodal safety improvements.</p> <p>Town Beach Water Quality and Drainage Improvements, Sanbornton. (Municipally Funded) Project Engineer for improvements to the town's beach on Lake Winnisquam. Services included field survey, a drainage study, stormwater design according to Best Management Practices (BMP), and permitting with NHDES in accordance with Shoreland Protection Act requirements. Implemented underground stormwater storage, a bioretention area (rain garden), a vegetated treatment swale, and a series of retaining walls to minimize erosion.</p> <p>Lilac Pedestrian Bridge, Hooksett, NH. (SBA and Municipally Managed) Environmental Engineer for the fast-tracked evaluation, design, and construction phase of a project that replaced a failing bridge with a 490-ft-span steel truss. Responsible for wastewater forcemain and pumping design. <i>The project received a Silver Award for Engineering Excellence from ACEC-NH.</i></p>			
Charlotte Brodie	NH Certified Wetland Scientist	33	32
<p>Main Street Bridge Rehabilitation, Laconia. (SBA) For a project that replaced a complex three-span bridge, served as a Wetlands Scientist to provide wetland permitting assistance, rare, threatened and endangered species research and support for the NH DES Wetlands permit. <i>This project was designated as the overall winner of the annual ACEC-NH Engineering Excellence competition.</i></p> <p>Gale River Loop Road & Bridge Reconstruction, USDA Forest Service, Bethlehem, NH. (Federally Funded) NH Certified Wetlands Scientist for a design-build project including design and reconstruction of a portion of Gale River Loop Road and four bridges.</p> <p>Birchdale Road Bridge Replacement, Bow, NH. (SBA) Wetland Scientist for the permitting for replacement and widening of an existing 13-ft-wide metal plate pipe arch in the NHDOT Municipal Bridge Aid Program. Delineated and evaluated wetlands.</p>			
Multimodal Planning, GIS, and Public Engagement			
Chris Sargent	American Institute of Cert. Planners, Cert. Floodplain Manager	18	3
<p>Middlesex Walkable Village Master Plan, Middlesex VT. (State and Municipal Funding) Project Manager for Middlesex Village master planning effort to develop improved downtown streetscape and community center. Responsible for facilitating private landowner conversations to investigate opportunities surrounding public/private partnerships and for overall project design and project management.</p> <p>Route 5 Corridor Master Plan, Fairlee, VT. (State and Municipal Funding) Project Manager and Senior Planner for a downtown economic, multimodal transportation, and stormwater revitalization plan serving 0.5 miles of a core downtown area. Responsible for leading client and public stakeholder coordination, land use studies, economic development and engagement subconsultant coordination, and oversight of team deliverables and report production. The project is supported by a Vermont Better Connections grant which includes funding from VTrans, ACCD and DEC.</p> <p>Pavement Condition Index Study, MaineDOT, Statewide, ME. (State Funding) Senior Planner to draft the final report and summary for the project to develop a statewide Airport Pavement Maintenance System (APMS) and database. MaineDOT and individual airports across the state will be able to use the database to track pavement maintenance work, the database will also facilitate each airport's ability to capitalize on FAA funding and enable the State of Maine to effectively budget for critical infrastructure maintenance projects.</p>			

TEAM MEMBER	CREDENTIALS	TOTAL YEARS	YEARS WITH D&K
Water Resources			
Ross Tsantoulis	Professional Engineer, LPA	13	3
Taxiway A Reconstruction and Extension, Dillant-Hopkins Airport, Keene. (NHDOT block grant) Senior Engineer responsible for supporting design and construction of taxiway and drainage improvements.			
Wallis Road Culvert Replacement, Rye, NH. (Municipally Funded) Project Engineer for evaluation, design and permitting for the replacement of an old stone box culvert.			
River Road Slope Stabilization, Caribou, ME. (FEMA) Civil Engineer responsible for leading design of a rapid response to a roadway embankment failure.			
Electrical			
Wilbur Horton, Jr.	Professional Engineer	33	8
Taxiway Extension and Bridge Design, MHT, Manchester. (NHDOT block grant) Provided electrical CADD support for the Manchester Airport taxiway extension and bridge design			
Taxiway Lighting System, MHT, Manchester. (NHDOT block grant) Responsible design and layout of a taxiway centerline lighting system and a grounding system for a new apron.			
Main Street Lighting Design, St. Albans, VT. (FHWA, State, Municipally Funded) Senior Electrical Engineer for design of underground distribution for a downtown revitalization project. Improvements included distribution design for LED street lighting, 200A event service to a park, and traffic signals.			
Survey/Drone			
David Mann	Licensed Land Surveyor	45	3
ROW and Topographic Survey, Bigelow Hill Road/NH 124 Intersection Improvements, Marlborough, NH. (Municipally Funded) Chief of Survey to perform Right-of-Way and topographical surveys of NH 124 alignment. Project included meetings with NHDOT engineers for approvals of intersection improvements.			
ROW Survey, Crowning Shield Road, Chesterfield, NH. (Municipally Funded) Chief of Survey for Right-of-Way survey for upgrades to existing town highway.			
Horizontal and Vertical Control and Abutter Coordination, Lincoln Road, Chesterfield, NH. (Municipal) Provided horizontal and vertical control survey for reconstruction of 2,000 feet of town highway. Also staked Right-of-Way limits and provided services for negotiations with abutting landowners regarding ROW and other rights.			
Soils Engineering			
Andy Hoak	Professional Engineer, Professional Geologist	27	4
Keating-Birchwood Area Reconstruction, Dover, NH. (Municipally Funded) Geologist for design of 4,400 feet of utilities and road reconstruction in a residential area. Design elements incorporate Complete Streets multimodal transportation design measures and the integration of Low Impact Design (LID) stormwater infiltration and treatment facilities. Responsible to evaluate subsurface conditions.			
Roxbury Road Slope Stabilization, Marlborough, NH. (Municipally Funded) Geologist for evaluation and remedial design to address a failing 50 ft x 50 ft roadway slope on the outside of a corner. Led analysis of subsurface conditions based upon soil testing results, survey, and available mapping.			
River Road Slope Stabilization, Caribou, ME. (FEMA) Geologist for a rapid response design to address a slope failure affecting a City-owned roadway. Supported geotechnical analysis including slope stability calculations for the 100-ft-high slope and soils assessment.			

APPENDIX: APPLICABLE WORK EXPERIENCE

PROJECT	LOCATION	STUDY	DESIGN	PERMITTING	BID PHASE	CONSTRUCTION
LPA (TA/TE/CMAQ, etc.)						
S. Main Street Sidewalks & Bridge	Brookline					
SRTS Sidewalks	Claremont					
Pedestrian Crossing	Newmarket					
Road Diet Painted Pedestrian Facilities	Keene					
Marlboro Street	Keene					
NH 130 Sidewalks	Brookline					
SRTS Sidewalks	Hillsborough					
Alvah Wilson Sidewalks & Bridge	Gilford					
Lahaye Drive Shared Use Pathway	Lebanon					
SRTS Sidewalks	New Ipswich					
State Aid Highway						
Dunklee Road/NH 3A Intersection	Bow					
Municipal Bridge Aid and MOBRR						
South Road Bridge	Harrisville					
NH 12A Bridge	Lebanon					
Dunklee Road Bridge	Bow					
Birchdale Road Bridge	Bow					
Lilac Pedestrian Bridge	Hooksett					
First Crown Point Road Bridge	Strafford					
Converse Road Bridge	Temple					
Main Street Bridge,	Laconia					
Archertown Road Bridge	Orford					
Northwood Road Bridge	Strafford					
Evans Road Bridge	Wentworth					
Sutton Road Bridge	Newbury					
Places Mill Road Bridge	Alton					
Village Road Bridge	Newbury					
Fremont Road Bridge	Fremont					
Belknap Mountain Road Bridge	Gilford					
Borough Road Bridge	Hill					
Towle Road Bridge	Chester					
Croydon Road Bridge	Grantham					
Cass Mill Road Bridge	Hill					
Ridge Road Bridge	Nashua					

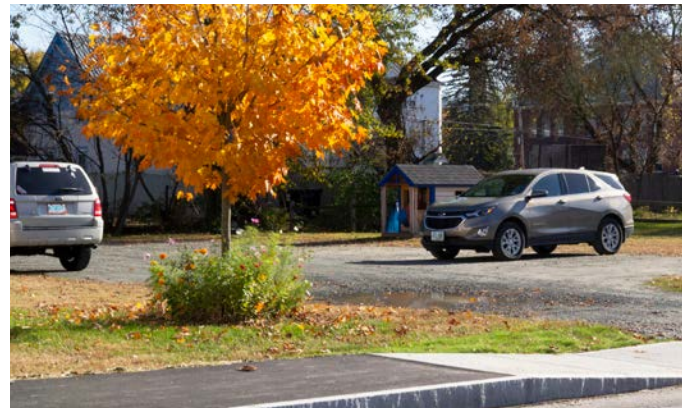
To provide a detailed overview of D&K's experience for each project type, D&K has included select project descriptions and photographs on the following pages.



The Main Street Bridge included complex construction phasing (numbered above) to virtually eliminate full roadway and waterway closures as well water, sewer, and electrical utility interruptions. D&K's team partnered closely with the City, businesses, and event organizers throughout design and construction.

Main Street Bridge, Laconia. D&K provided study, evaluation, and design as well as study and design for the rehabilitation of the Main Street Bridge, the primary crossing over the Winnepesaukee River and predominant access in and out of the downtown area. The bridge consists of three distinct and separate bridge structures that each carry a City street. The three streets and bridge structures converge at a point to make one overall bridge structure at the street intersections. The spans include a 137-ft, 80-ft-wide curved bridge, constructed in 1968; a 75-ft by 69-ft-wide structure, constructed in 1970 and a 137-ft-long, 70-ft-wide, curved bridge, constructed in 1968. *ACEC-NH awarded this project the overall Award for Engineering Excellence.*

SRTS Sidewalks, Claremont. D&K provided evaluation, design, permitting, and bid phase services for 1,500 linear feet of sidewalk in downtown Claremont. The LPA project's elements include installation of ADA tip-downs and detectable warning surfaces, and replacement of selected sections of sidewalk on Belding Street from North Street to Hanover Street and the north side of Myrtle Street from Forest Street to Tyler Street. D&K's services include preliminary and final design, public meetings, and bid phase assistance.



Lilac Bridge, Hooksett. D&K provided design and permitting assistance for replacement of a failing 490-ft former vehicle and wastewater utility bridge over the Merrimack River. The project was completed under a compressed timeframe and included eight separate stakeholder groups holding jurisdiction over the project. The completed project is a prefabricated steel truss that mimics the appearance of the original historic truss. D&K managed coordination and moderated conflicts between these groups throughout this complex project's design and construction phases. *The project received a 2020 Silver Award for Engineering Excellence from ACEC-NH.*





4 SBA Projects, 1 Pedestrian Crossing Project, and 1 State Aid Highway Project, Bow. D&K is providing evaluation, design, and permitting for a range transportation projects including replacement of the Birchdale, Page, and River Road Bridges, rehabilitation of the Dunklee Road Bridge, installation of a high-intensity activated crosswalk beacon (HAWK Beacon) on NH 3A, and installation of a new signalized intersection of NH 3A and Dunklee Road. Birchdale Road Bridge and the NH 3A HAWK Beacon have been completed and the Dunklee Road Bridge and Intersection projects are in the construction phase. Page and River Road Bridges are advancing through design phases. D&K has served as Bow's Town Engineer since 2011.



Village Common Covered Bridge Rehabilitation (Design-Build), Wentworth. Wentworth, NH, and the NHDOT faced a complex situation: a circa-1909, irreparable, 96-foot-long, steel truss bridge over the Baker River was to be removed, rerouting school children and others along an unprotected shoulder on NH 25. Concurrently, the client found a freely available, but longer, 106-foot covered bridge at an active demolition site. Rapidly, under a small, uncertain budget, DuBois & King designed shoring and historic rehabilitation for transport of the bridge to be placed on modified abutments. The team observed construction activities and provided resident engineering for this unusual project. Removal of the existing bridge and modification of the abutments were completed using SBA funding; D&K used the design-build method to reduce costs and project delays. *The project received awards from PlanNH, ACEC-NH and SENH.*

Marlborough Street Reconstruction, Keene. D&K is providing evaluation, study, design, and permitting for a two-phase project that reconstructs utilities, resurfaces the roadway, installs chicanes to calm traffic, and completes appurtenant pedestrian connectivity improvements. The project is located in a mixed-use urban context and requires significant coordination with a large number of abutters as well as City staff. The municipally-funded utility reconstruction is completed and the TAP-funded roadway portion is in the design phase.



NH 12A Bridge over NH RR, Lebanon. DuBois & King studied existing conditions, reviewed work by another Consultant and Value Engineered (VE) the design of a new bridge replacement. Three (3) alternatives have been developed for replacement of Bridge 062/117 which carries NH 12A (S. Main Street) over the NH Railroad. Currently posted for 20 tons, the circa-1949 bridge is composed of a 145-ft-long, 27-ft-8-in-wide, 3-span steel stringer superstructure with a concrete deck. The substructure consists of pile-supported abutments and pile bents. Firm services include assessment of existing conditions, assessment of previous alternatives/ design, development of alternatives concepts, and completion of a narrative report summarizing this information. The preferred alternative is a 63-foot-long steel stringer with concrete deck superstructure on skewed abutments. The opinion of probable cost for the VE alternative is \$7M, a \$3M reduction in cost from the original concept.



South Main Street Sidewalks and Bridge, Brookline. D&K is assisting the Town of Brookline with the development of sidewalks, pedestrian crossings, and pedestrian bridges along South Main Street and Mason Road. The project includes installation of approximately 2,300 linear feet of new sidewalk, and two pedestrian bridges. Transportation Alternatives Program (TAP) funding for the project is administered through the New Hampshire Local Public Agency (LPA) program. D&K is guiding the Town through the LPA process by providing survey, design, NEPA documentation and permitting assistance, wetland delineation, public engagement, traffic analyses, and construction phase services.



Windham Depot, Windham. D&K provided site engineering services for historic rail facility and parking/picnic area for the Salem-Concord Bikeway. D&K worked with the Town of Windham's Administrator and the Windham Depot Advisory Committee to prepare design documents. The project rehabilitated the existing train and freight station buildings to mimic their original state; constructed 37 parking spaces, oversized parking for winter motorized and equestrian recreation; created a green space and picnic area space; and installed new electrical, toilet facilities, and cosmetic improvements. The project was funded by a New Hampshire Department of Transportation (NHDOT) Transportation Enhancement (TE) grant and other federal and municipal funds.



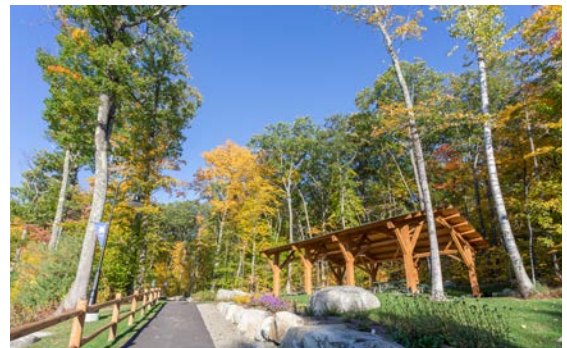
Lahaye Drive Shared Use Pathway, Lebanon. D&K is providing design and permitting for a TAP-funded project that constructs an approximately 1,000-ft-long multimodal use pathway serving employees and visitors of Dartmouth-Hitchcock Medical Center. D&K is responsible for providing study and design phase services, public engagement, and environmental documentation and permitting as required by the NHDOT LPA process. The photo shown to the right indicates a potential pathway location.



Gale River Loop Road Bridges (Design-Build), USFS, Bethlehem, NH. D&K was the lead engineer, provided all of the engineering and survey services, managed the project, prepared all contract documents for the design-build team, and managed the project. A storm event damaged sections of the National Forest roadway, removing surfacing and cutting into the subgrade and ditch, destroying three roadway bridges, and damaging a fourth bridge. D&K designed three replacement structures with spans ranging from 43-ft to 47-ft, including new precast concrete panel walls (large MSE panels) set on precast concrete footings and new glue-lam timber decks. Roadwork included embankment construction, drainage excavation, installation of culverts, and paving the aprons to the four bridges.



Weirs Community Park, Laconia. DuBois & King worked with the City's Parks and Recreation Department to design a new park on Lucerne Avenue. The park includes a restroom building, amphitheater, playground, and pavilion. D&K used Low Impact Development stormwater practices including swales and a new rain garden. Site lighting consisted of low wattage, low-lumen output, full cutoff, LED architectural style pole-mounted luminaires to produce low-level lighting of the park, roadway, pavilion, and amphitheater. The lighting system utilized occupancy and motion sensors and photocells to control lighting and reduce energy use.



Pier and Wrights Covered Bridges, Newport. DuBois & King designed the rehabilitation of the Pier and Wright's Covered Bridges. Pier Covered Bridge, constructed in 1907, is a 217-ft-long, two-span continuous covered bridge. Heritage Protection Group designed a dry sprinkler systems, linear heat detection systems, dry hydrants. The project included provisions for vandal-resistant lighting. D&K's design included application of intumescent paint, insecticides, and fire retardant and repair of deteriorated upper lateral bracing, timber siding, deck, and runner planks. Wright's Covered Bridge, constructed in 1906, is a 124-ft-long, single span truss. Principles of the Secretary of the Interior's Standards for Rehabilitation and the Burlington Charter were applied to all phases of the work. This project included a Section 106 historical clearance.



Bunker Hill Road Bridge, Hill, NH. D&K is providing bridge study, design, and construction phase engineering for Bridge No. 140/099 crossing Needle Shop Brook. Services include alternatives evaluation and recommendations to rehabilitate or replace the existing bridge, permitting assistance, preliminary and final engineering plans and specifications, assisting the Town during the bid phase, and providing the Town with construction administration and observation services. The existing bridge is a narrow 23-foot-long voided slab deck on concrete abutments, which was closed to traffic. Deficiencies included cracking and spalling of concrete curbs and brush curbs; cracks, spalls at underside of concrete slabs along joints with exposed/broken reinforcing steel (prestressing strands); efflorescence and leakage at underside of and through slab panel joints; missing stones, and settlement of southwest wingwall.

